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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/062,799	SKERPAC, VALENE
	Examiner	**Art Unit**	
	Zachary A. Davis	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _11 March 2008_.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1,2 and 4-16_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1,2 and 4-16_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 March 2008 has been entered.

2.   By the above submission, no claims have been amended. Claims 8-14, previously presented in the supplemental reply filed on 05 April 2007 (which was not entered as detailed in the final rejection mailed 15 October 2007), have been added. New claims 15 and 16 have also been added. No claims have been canceled. Claims 1, 2, and 4-16 are currently pending in the present application.

Response to Arguments

3.   Applicant's arguments filed 11 March 2008 have been fully considered but they are not persuasive.

Claims 1 and 4-6 were rejected under 35 U.S.C. 112, second paragraph, as indefinite. Claims 1, 2, and 4-7 were rejected under 35 U.S.C. 102(b) as anticipated by Kanevsky et al, US Patent 5897616.

Regarding the rejection of Claim 1 under 35 U.S.C. 112, second paragraph, as indefinite, Applicant argues that the limitation of "a first data base having a plurality of words and language rules for generating one-time challenge phrases" provides antecedent basis for "said first data base for randomly generating a one-time challenge phrase" (page 12 of the present response). Although the Examiner agrees that the former provides antecedent basis for a first data base in general, the Examiner does not agree that there is sufficient antecedent basis for the limitation as a whole, in particular the limitation that the first data base is "for **randomly** generating a one-time challenge phrase" (emphasis added).

Regarding the rejection of Claim 4 under 35 U.S.C. 112, second paragraph, as indefinite, Applicant submits that "the user" of line 11 refers to "the user" in line 1 and not the "multiplicity of users" in lines 6-7 (page 12 of the present response). However, the Examiner notes that this is not explicitly clear from the language of the claim. The limitation of "the user" in line 11 does not distinguish sufficiently between the user first recited in line 2 and the additional multiplicity of users in lines 6-7; it is also not clear whether the user recited in line 2 is one of the multiplicity of users or if the user is separate. These issues still render the claim indefinite. Further, Applicant has not addressed the other mentioned limitation of "said stored biometric model of said one user" as detailed in the previous Office action.

Regarding the rejection of Claim 5 under 35 U.S.C. 112, second paragraph, as indefinite, Applicant argues that "said challenge phrase" in line 11 clearly refers to the "one-time challenge phrase" of line 8 and not to the "one-time challenge phrases of lines 5-6 (page 12 of the present response); however, similar to "the user" in both Claims 4 and 5, this is not, in fact, explicitly clear from the language of the claim. The limitation "said challenge phrase" does not distinguish sufficiently between the plural challenge phrases that can be generated in lines 5-6 and the phrase generated at line 8. Regarding the limitation "the stored biometric models for validating said spoken response" in lines 14-15, Applicant argues that there is antecedent basis for "the stored biometric models" provided by the storing in line 7 of "a biometric model of each of a multiplicity of users". Although the Examiner agrees that the latter does provide antecedent basis for "stored biometric models" in general, the Examiner does not agree that there is sufficient antecedent basis for the limitation as a whole, in particular the limitation the models are "for validating said spoken response". Further, Applicant has not addressed the limitations of "said one of said users" or "said stored biometric model of said one of said users" as detailed in the previous Office action. Additionally, with particular reference to the statement in the previous Office action that "it is unclear how the spoken response can match both the challenge phrase and the validation" (see page 8 of the Office action mailed 15 October 2007), Applicant again attempts to clarify the interpretation of the claim (pages 12-13 of the present response). However, the Examiner notes that Applicant's remarks do not appear to address explicitly the language at issue in the rejection. In particular, the Examiner notes that, as written, the

claim requires that the spoken response be verified as both matching the challenge

phrase and as matching a validation. However, this is generally unclear; while it makes

sense for the spoken response to be verified as to whether it matches the challenge

phrase, it is not clear how the spoken response is compared with the abstract concept

of a "validation" to determine a matching between the two.

Regarding the rejection of Claims 1, 2, and 4-7 under 35 U.S.C. 102(b) as

anticipated by Kanevsky et al, US Patent 5897616, and specifically in reference to

Claim 1, Applicant argues that Kanevsky does not disclose generation of a one-time

phrase but instead generates a random question, and asserts that in Applicant's

system, "the speaker must speak those challenged phrases" (page 9 of the present

response). First, as previously noted, the Examiner submits that a random question is,

in fact, a subset of a one-time (i.e. random) phrase, and therefore the random question

in Kanevsky reads on the claimed random phrase (column 6, lines 25-29). Further, the

Examiner notes that Claim 1 never explicitly recites that the spoken response to the

challenge phrase is the challenge phrase itself repeated back by the speaker. The

claim more broadly recites "a spoken response from the user to said delivered one-time

challenge phrase"; it does not require that the response be the phrase itself. Although

the claims are interpreted in light of the specification, limitations from the specification

are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057

(Fed. Cir. 1993). It is noted that, in contrast, new Claims 15 and 16 recite receiving "a

spoken response from the user **of** said delivered one-time challenge phrase" (emphasis

added), which more clearly limits the response to the phrase itself.

Applicant further argues that Kanevsky does not teach the claimed first data base of Claim 1, and that the data base in Kanevsky only contains information specific to the user that is used to generate a random question (see pages 9-10 of the present response). However, the Examiner respectfully disagrees; since the database in Kanevsky is specifically used to generate questions, there must clearly be some sort of language rule used to generate these questions.

Further, Applicant argues that Kanevsky does not match the answer to the question and therefore cannot disclose the claimed matching of the second signal (representative of the spoken response) and the challenge phrase as recited in Claim 1 (page 10 of the present response). The Examiner respectfully disagrees, noting that Applicant appears to be relying on a more restrictive definition of "matching". Applicant appears to be suggesting that matching means comparing two items for equality. In contrast, the Examiner submits that a match between the challenge phrase and the response more broadly means that the two correspond to each other. That is, given that the challenge phrase is a random question, if the response is the correct answer to that question, then the response would match the challenge (i.e. the answer matches the question). Therefore, the Examiner submits that the cited portions of Kanevsky disclose the controller as claimed (see, as previously cited, column 6, line 25-column 7, line 25). The Examiner again notes that new Claims 15 and 16 appear to more clearly set forth this distinction that Applicant is attempting to draw in reference to Claim 1.

Additionally in reference to Claim 1, Applicant argues that "Kanevsky does not require the user to speak the question" (page 10 of the present response). In response,

the Examiner notes that although the claim recites a "one-time challenge phrase... for the user to speak", the claim does not explicitly include a step in which the user actually speaks the phrase. Rather, the claim recites receiving a spoken response to the challenge phrase, and the Examiner believes that the answer to the question disclosed by Kanevsky (column 6, lines 34-37) does, in fact, constitute a spoken response to the challenge phrase as claimed. Again, the Examiner notes that new Claims 15 and 16, in contrast to Claim 1, recite receiving "a spoken response from the user of said delivered one-time challenge phrase", which more clearly limits the response to the phrase itself.

In reference to Claim 2, Applicant makes similar arguments as set forth with respect to Claim 1, although Applicant does not provide any clear evidence in relation to those arguments (see page 11 of the present response). These arguments were addressed above. Similarly, Applicant asserts that Claims 4-6 and 11-14 are allowable for similar reasons (page 11 of the present response).

The Examiner notes that Applicant has not addressed Claims 7-10 in the present response, and therefore this does not fully comply with the requirements of 37 CFR 1.111, because Applicant must reply to every ground of objection and rejection in the prior Office action. However, because this appears to be a *bona fide* attempt to advance the prosecution of the present application, it has been assumed that these claims were intended to be grouped with the other dependent claims as noted above, and the reply has been treated as though it were fully in compliance with the provisions of 37 CFR 1.111.

Regarding new Claims 15 and 16, Applicant's arguments fail to comply with 37

CFR 1.111(b) because they amount to a general allegation that the claims define a

patentable invention without specifically pointing out how the language of the claims

patentably distinguishes them from the references. Specifically, Applicant merely states

that Claim 15 includes "a controller... for randomly generating a one-time challenge

phrase... and delivering said one-time challenge phrase... for the user to speak said

one-time phrase exactly" and "to simultaneously process said spoken response for

speech recognition and to issue a second validation signal... in response to a match

between said spoken response and said one-time challenge phrase" and alleges that

"Kanevsky is void of any such structure or teaching" (pages 11-12 of the present

response). However, Applicant does not explicitly point or explain the differences

between the claim and Kanevsky, nor does Applicant address any differences between

new Claims 15 and 16 and the previously pending independent Claims. The new

claims are rejected as set forth below.

Therefore, for the reasons detailed above, the Examiner maintains the rejections

as set forth below.

Claim Rejections - 35 USC § 112

4.   As detailed above in the response to arguments, Applicant's arguments in

reference to the various rejections under 35 U.S.C. 112, second paragraph, are not

persuasive. Additionally, not all of the issues set forth in the previous Office action have

been addressed, and further, the new claims raise additional issues of indefiniteness.

Therefore, Claims 1 and 4-6 remain rejected, and new Claims 8-16 are also rejected, as

set forth below.

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

6.   Claims 1, 4-6, and 8-16 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

        Claim 1 recites the limitation "said first data base for randomly generating a one-

time challenge phrase". There is insufficient antecedent basis for this limitation in the

claim.

        Claim 4 recites the limitation "the user" in line 11 of the claim. Because there is a

multiplicity of users in lines 6-7 and also a user in line 2, it is not clear to which user this

is intended to refer. Further, the claim recites "said stored biometric model of said one

user" in lines 15 and 17 of the claim. There is insufficient antecedent basis for this

limitation in the claim.

        Claim 5 recites the limitation "the user" in line 10 of the claim. Because there is a

multiplicity of users recited in line 7, it is not clear to which user this is intended to refer.

The claim also recites "said challenge phrase" in line 11; it is not clear whether this

refers to one of the challenge phrases mentioned at lines 4-5, or to the challenge

phrase of line 10. Additionally, the claim recites "the stored biometric models for

validating said spoken response" in lines 14-15; the claim also recites the limitation

"said one of said users" in line 15, lines 16-17, and line 20. The claim further recites

"said stored biometric model of said one of said users" in lines 16-17. There is

insufficient antecedent basis for these limitations in the claim. Finally, in the limitation

"said spoken response as matching said challenge phrase and a validation" in lines 18-

19, it is unclear how the spoken response can match both the challenge phrase and the

validation; in particular, it is unclear how the spoken response matches the validation

itself, given that a validation is a relatively abstract concept and not a particular phrase

that could be spoken.

Claim 8 recites the limitation "in response to validating of said first signal as

representative of the user". First, there is insufficient antecedent basis for the limitation

"said first signal" in the claims. Further, because there is no first signal in Claim 8 or

Claim 2, from which it depends, it is not clear where the "validating of said first signal"

that is referred to was previously recited.

Claim 9 recites that the "randomly generated one-time challenge phrase makes

sense and is simple to say". First, it appears that placing such constraints on the

challenge phrase may raise a contradiction with the requirement that the phrase be

completely randomly generated. Further, the phrases "makes sense" and "simple to

say" are relative terms. There is nothing in the claims or specification that provide a

standard to determine whether a phrase would make sense or be simple to say. This

renders the claim indefinite. See MPEP § 2173.05(b).

Claim 10 recites the limitation "said randomly generated one-time challenge

phrase is a language subset specific to a subject area"; however, this is generally

unclear, as it is not clear from the way the terms "language subset" have been used in the specification how a phrase itself could be a language subset. It appears that there may be language missing from the limitation.

Claim 11 recites the limitation "in response to validating of said first signal as representative of the user". First, it is not clear to which user the phrase "the user" is intended to refer; for example, the user first mentioned in line 1 or line 3 of Claim 5, one of the multiplicity of users recited in Claim 5, line 7, or "said one of said users" first recited in Claim 5, line 15. Further, there does not appear to be sufficient antecedent basis for the phrase "validating of said first signal" as a whole.

Claim 12 also recites that the "randomly generated one-time challenge phrase makes sense and is simple to say". First, it appears that placing such constraints on the challenge phrase may raise a contradiction with the requirement that the phrase be completely randomly generated. Further, the phrases "makes sense" and "simple to say" are relative terms. There is nothing in the claims or specification that provide a standard to determine whether a phrase would make sense or be simple to say. This renders the claim indefinite. See MPEP § 2173.05(b).

Claim 13 recites the limitation "said randomly generated one-time challenge phrase is a language subset specific to a subject area"; however, this is generally unclear, as it is not clear from the way the terms "language subset" have been used in the specification how a phrase itself could be a language subset. It appears that there may be language missing from the limitation.

Claim 14 recites the limitation "said challenge phrase". It is not clear whether this refers to one of the challenge phrases mentioned in Claim 5 at lines 4-5, or to the challenge phrase of Claim 5, line 10. Further, it is not clear how it would be possible to compare the spoken response to the stored biometric models once the response has been encrypted.

Claim 15 recites the limitation "the user" in line 8. It is not clear whether this is intended to refer to the user recited in line 2, or to one of the plurality of authorized users recited in line 7. Further, the claim recites the limitation "said first data base for randomly generating a one-time challenge phrase" in lines 9-10. There is insufficient antecedent basis for this limitation in the claim. Further, Claim 15 recites "said stored biometric model for said authorized user" in lines 17-18; it is not clear to which of the stored biometric models or authorized users this is intended to refer. The claim also recites "to issue a second validation signal as representative of said one-time challenge phrase" in line 20; it is not clear how a validation signal would be representative of the challenge phrase, however. Additionally, the claim recites "said controller to issue a positive authentication signal as representative of an authorized user in response to said first validation signal and said second validation signal being simultaneously received" in lines 23-25. However, it is not clear where the first and second validation signals are received from, noting that the validation signals are each issued by the controller, and also that the above limitation appears to require that the validation signals are also received at the controller. This is generally unclear.

Claim 16 recites the limitation "said first signal" in line 9. There is insufficient

antecedent basis for this limitation in the claim. Claim 16 further recites "to issue a

second validation signal as representative of said one-time challenge phrase" in line 18;

it is not clear how a validation signal would be representative of the challenge phrase,

however. Further, the claim recites "said controller to issue a positive authentication

signal as representative of an authorized user in response to said first validation signal

and said second validation signal being simultaneously received" in lines 21-23.

However, it is not clear where the first and second validation signals are received from,

noting that the validation signals are each issued by the controller, and also that the

above limitation appears to require that the validation signals are also received at the

controller. This is generally unclear.

Claims not specifically referred to are rejected due to their dependence on a

rejected base claim.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8.   Claims 1, 2, 4-7, 9, 10, 12, and 13 are rejected under 35 U.S.C. 102(b) as being

anticipated by Kanevsky et al, US Patent 5897616.

In reference to Claim 1, Kanevsky discloses a biometric security system including a station for receiving input information, which is representative of a user, from the user and generating a signal responsive thereto (column 6, lines 4-11, for example); a database having a plurality of words and language rules for generating one-time challenge phrases (column 6, lines 25-29); a database having biometric models of users (column 6, lines 16-24); and a controller that receives and validates the signal as representative of the user, where the controller communicates with the database that generates one-time challenge phrases for the user to speak (column 6, lines 25-29), and communicates with the station to receive a spoken response and generate a second signal that represents the response (column 6, lines 34-37), to validate voice information by speaker recognition (column 6, line 66-column 7, line 12) and verify voice information by speech recognition (column 6, lines 35-65), and to validate the spoken response to the challenge as representative of the user if the validation by speaker recognition and verification by speech recognition succeed (column 7, lines 14-25).

Claims 2 and 7 are directed to methods corresponding substantially to the system of Claim 1, and are rejected by a similar rationale.

In reference to Claims 9 and 10, Kanevsky further discloses that the phrase makes sense and is from a language subset specific to subject area (column 6, lines 25-29; see also column 7, line 41-column 8, line 15).

In reference to Claim 4, Kanevsky discloses a biometric security system including a station for receiving input information, which is representative of a user, from the user

and generating a first signal responsive thereto (column 6, lines 4-11, for example); a

database having a plurality of stored word phrases (column 6, lines 25-29); a database

storing biometric models of users (column 6, lines 16-24); and a controller receiving and

comparing the first signal to a stored biometric model and validating the first signal if the

first signal matches a stored model (column 6, line 66-column 7, line 12), where the

controller further randomly selects and forwards a word phrase as a challenge for a user

to speak (column 6, lines 25-29), receives and compares with the challenge a spoken

response to the challenge (column 6, lines 35-65), and verifies the response as

matching the challenge (column 6, lines 35-65), and where the controller additionally

validates the response if the response matches the stored model (column 6, line 66-

column 7, line 12), and the controller issues an authentication signal if both the

response matches the phrase and the response is representative of a user (column 7,

lines 14-25).

Claims 5 and 6 are directed to methods corresponding substantially to the

system of Claim 4, and are rejected by a similar rationale.

Claims 12 and 13 recite limitations also recited in Claims 9 and 10, and are

rejected by a similar rationale.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 8, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kanevsky.

In reference to Claims 8 and 11, Kanevsky discloses everything as described

above in reference to Claims 2 and 5, respectively. Kanevsky does not explicitly

disclose establishing a session time out limit; however, Official notice is taken that it is

well known in the art to establish a session time out in order to require that

authentications must take place within a specific time period, so that the probability of

an imposter being able to take more sophisticated deceptive actions is decrease.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the methods of Kanevsky to include a time out, in order to

increase security and to realize the above noted predictable result.

In reference to Claim 14, Kanevsky discloses everything as described above in

reference to Claim 5. Kanevsky does not explicitly disclose encrypting or digitally

signing the spoken response. However, Official notice is taken that it is well known in

the art to encrypt data when privacy of that data is needed and/or if that data will be

sent over an insecure channel. Further, Official notice is taken that it is well known in

the art to use a digital signature when it is necessary to verify the integrity of data, i.e. to

make sure that the data has not been altered. Therefore, it would have been obvious to

one of ordinary skill in the art at the time the invention was made to modify the method

of Kanevsky to include encryption, in order to increase the privacy and security of the

data, and to include a digital signature, in order to allow the integrity of the data to be

verified.

11.   Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kanevsky in view of Kashani, US Patent Application Publication 2002/0165894.

In reference to Claims 15 and 16, Kanevsky discloses a speech biometric

security system including a station for receiving input information, which is

representative of a user, from the user and generating a signal responsive thereto

(column 6, lines 4-11, for example); a database having a plurality of words and

language rules for generating one-time challenge phrases (column 6, lines 25-29); a

database having biometric models of users (column 6, lines 16-24); and a controller that

receives and validates the signal as representative of the user, where the controller

communicates with the database that generates one-time challenge phrases for the

user to speak (column 6, lines 25-29), and communicates with the station to receive a

spoken response and generate a second signal that represents the response (column 6,

lines 34-37), to process the response by speaker recognition and issue a first validation

signal (column 6, line 66-column 7, line 12) and simultaneously process the response

by speech recognition and issue a second validation signal (column 6, lines 35-65), and

issue a positive authentication signal in response to the first and second validation

signals (column 7, lines 14-25). However, Kanevsky does not explicitly disclose that the

spoken response is the challenge phrase spoken exactly.

Kashani discloses a voice recognition system (paragraph 0048) in which a

sentence is constructed from random words taken from the recorded vocabulary of the

user (paragraph 0118) and the user is required to speak the random sentence exactly in

order to be authenticated (paragraphs 0118-0119). Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to modify

the systems of Kanevsky by requiring that the spoken response be exactly the same as

the challenge phrase, in order to prevent an attack in which a user's speech is

previously recorded and played back to impersonate the user (see Kashani paragraphs

0044, 0048, 0119).

Conclusion

12.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

        a.   Anderson, Jr., US Patent 5805674, discloses a voice recognition system

        in which users are given random phrases from a subset of phrases.

        b.   Vensko, US Patent 5806040, discloses a voice recognition system where

        users are given random phrases to speak.

        c.   Kennedy et al, US Patent 6084967, discloses a security token using voice

        authentication.

        d.   San Martin et al, US Patent 6681205, discloses a speaker independent

        voice recognition system where a user is given a random phrase to speak.

e.   Chainer, US Patent 6957337, discloses a system for biometric

authentication, such as voice recognition, without privacy invasion.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Zachary A. Davis whose telephone number is (571)272-

3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate

Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ZAD/
Examiner, Art Unit 2137

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2137